

CLAIMS

What is claimed is:

1. A storage area network (SAN) management system for a computer network including at least one SAN, comprising:
 - a SAN including a plurality of devices;
 - a computer that communicates with said SAN;
 - a SAN manager associated with said computer; and
 - a storage area mapping (SAM) module associated with said SAN manager that graphically represents said devices of said SAN and links between said devices, wherein said SAM module allows at least one of adding a link between said devices, removing a link between said devices and moving a link between said devices.
2. The SAN management system of claim 1 further comprising a discovery module associated with said SAN module that automatically discovers said devices and said links of said SAN.
3. The SAN management system of claim 2 wherein said SAM module generates a window with a tree list panel and a map panel.
4. The SAN management system of claim 3 wherein said map panel includes a tool bar with a plurality of icons, a first display area and a second display area.
5. The SAN management system of claim 4 wherein said SAM module displays a map of said devices with defined links in said first display area and said devices with undefined links in said second display area.
6. The SAN management system of claim 1 wherein said computer includes a pointing device and wherein said SAM module provides link details of a first link when a cursor is positioned over said first link for a first predetermined period, and wherein said SAM module provides device details

5 of a first device when a cursor is positioned over said first device for a second
6 predetermined period.

1 7. The SAN management system of claim 1 wherein said SAM
2 module displays a device type of said devices using shapes and a device
3 status of said devices using color.

1 8. The SAN management system of claim 1 wherein said SAM
2 module displays link types of said links using line segment types and link
3 status of said links using color.

1 9. The SAN management system of claim 1 wherein said SAM
2 module allows an operator to associate a discovered device with an inferred
3 hub.

1 10. A method for managing a storage area network (SAN),
2 comprising:
3 connecting a SAN including a plurality of devices to a computer;
4 providing a SAN manager that is associated with a storage area
5 mapping (SAM) module;
6 graphically representing said devices of said SAN and links
7 between said devices of said SAN using said SAM module; and
8 allowing at least one of adding a link between said devices,
9 removing a link between said devices and moving a link between said
10 devices.

1 11. The method of claim 10 further comprising automatically
2 discovering said devices and said links of said SAN using a discovery module
3 that is associated with said SAN manager.

1 12. The method of claim 11 further comprising generating a window
2 with a tree list panel of said SANs and said devices that are associated with
3 said computer and a map panel.

1 13. The method of claim 12 further comprising providing a tool bar
2 including a plurality of icons, a first display area and a second display area on
3 said map panel.

1 14. The method of claim 13 further comprising:
2 displaying a map of said devices with defined links in said first
3 display area; and
4 displaying said devices with undefined links in said second
5 display area.

1 15. The method of claim 10 further comprising:
2 providing a pointing device;
3 generating link details of a first link when a cursor is positioned
4 over said first link for a first predetermined period; and
5 generating device details of a first device when a cursor is
6 positioned over said first device for a second predetermined period.

1 16. The method of claim 10 further comprising:
2 displaying a device type of said devices using shapes; and
3 displaying a device status of said devices using color.

1 17. The method of claim 10 further comprising:
2 displaying a link type of said links using line segments types;
3 and
4 displaying a link status of said links using color.

1 18. The method of claim 10 further comprising allowing an operator
2 to associate a discovered device with an inferred hub.

1 19. A storage area network (SAN) management system for a
2 computer network including at least one SAN, comprising:
3 a SAN including a plurality of devices;
4 a computer that communicates with said SAN; and
5 a SAN manager associated with said computer;

6 a discovery module associated with said SAN manager that
7 automatically discovers said devices and said links of said SAN; and

8 a storage area mapping (SAM) module associated with said
9 SAN manager that graphically represents said devices of said SAN and
10 said links between said devices,

11 wherein said SAM module allows at least one of adding a link
12 between said devices, removing a link between said devices and
13 moving a link between said devices.

1 20. The SAN management system of claim 19 wherein said SAM
2 module allows an operator to associate a discovered device with an inferred
3 hub.

10020954-121901